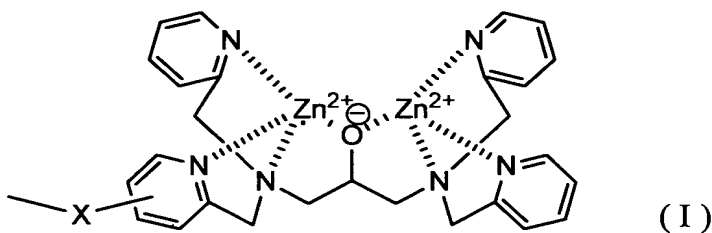


# A B S T R A C T

The present invention provides a method for measuring a surface plasmon resonance, the method enabling easy detection of the existence of a phosphorylated peptide (protein) and determination whether a peptide is phosphorylated or not in biological materials. The present invention also provides a noble metal compound having high capability of coordination to a phosphorylated peptide, and being conveniently usable in the method. A first method for measuring surface plasmon resonance of the present invention comprises: placing a noble metal compound on a bottom face of a prism, irradiating a light to the prism to detect a reflected light, wherein, the noble metal compound has substituents of following formula (I) on a side opposite to a side contacting the prism, and a subject sample is added to a side having the substituent groups (I) in the noble metal compound.



[wherein, X represents a linker group]